# IGHTSTREAMS

## **MLS2-DI PoE SERIES**



# Architectural Linear LED Illuminating System | LIGHTSTREAMS 2



### **Features**

- Power over Ethernet (PoE) enabled as Molex
- Tunable white feature for standard system or PoE system.
- Extruded aluminum housing for perfectly straight lines of light.
- · Dual directional illumination. Direct downlighting and indirect uplighting.
- Narrow profile; 1-7/8-inch width.
- Linear lengths; 2-ft. and above in increments of one-inch.
- Custom formulated high diffusion extruded
- Non-glare matte-white polyester powder coating finish.

  Cable mount from ceiling.
- Cataloged standard or custom set lumens-per-foot performances.

- A new custom designed batwing-type indirect diffuser. Spreads light from the linear LED boards into two distinct side lobes. When projected onto the ceiling results are a very consistent and wide spread of illumination.
- A new extrusion with a shallower overall
- height of 4-1/8". New additional drop-down or pop-up diffuser.
- 80 CRI standard. 90 CRI available
- Fixture lumens per watt ratios up to 115.
- Lighting controls and sensors.
- Custom colors available.
- Standard and custom corners.
- · American Made



# **Performance**

Based on 4ft, Module, 3500K, 80 CRI, HTA Direct diffuser, BW Indirect diffuser

4-1/8"	

Direct Lumens Per Foot	Indirect Lumens per Foot	Direct/Indirect %	Delivered Total Lumens (L)	System Watts (W)	Lumens Per Watt (LPW)	Color Te	
400	400	50/50	3200	28.4	113	3000K	97%
	500	45/55	3600	31.6	114	3500K	100%
	625	40/60	4100	35.8	115	4000K	102%
	825	35/65	4900	42.9	114		
	950	30/70	5400	47.7	113	5000K	103%
	1200	25/75	6400	57.6	111		
500	400	55/45	3600	32.7	110		
	500	50/50	4000	35.9	111		_
	625	45/55	4500	40.1	112	1 ( , -	
	825	40/60	5300	47.2	112	1 (1	`
	950	35/65	5800	52.0	112	1 \	
	1200	30/70	6800	61.9	110	//	
625	400	60/40	4100	38.1	108	//	
	500	55/45	4500	41.3	109	`	
	625	50/50	5000	45.5	110	1	
	825	45/55	5800	52.6	110		
	950	40/60	6300	57.4	110	1	//   '
	1200	35/65	7300	67.3	108	/	′;
825	400	70/30	4900	47.3	104	/	i
	500	60/40	5300	50.5	105	1	1 I
	625	55/45	5800	54.7	106	1 \	i l
	825	50/50	6600	61.8	107	1	
	950	45/55	7100	66.6	107	1	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
	1200	40/60	8100	76.5	106	]	
960 MAX	400	70/30	5440	54.1	101		ı
	500	65/35	5840	57.3	102		
	625	60/40	6340	61.5	103		
	825	55/45	7140	68.6	104	1	
	950	50/50	7640	73.4	104	]	
	1200	45/55	8640	83.3	104	1	

5000K 103%

Actual performance may differ by +/- 5% when operating between 12V-42VDC.







-1**-**7/8" ---





## MLS2-DI PoE Series | LIGHTSTREAMS 2

Architectural Linear LED Illuminating System | Suspended Direct/Indirect

Ex. MLS2-DI-144-825-950-35K-HTA-BW -40VDC-180996-1C



MLS2	– DI			-				- 40VDC -			_	_
SERIES	MOUNTING	MODULE OR ROW LENGTH	LUMENS/ FT DIRECT	LUMENS/ FT INDIRECT	COLOR TEMP	DIFFUSER/ DIRECT	DIFFUSER/ INDIRECT	LED MODULES FORWARD VOLTAGE	MOLEX DRIVER	CIRCUITING	EMERGENCY LIGHTING	CUSTOM PAINT COLORS
MLS2 LightStreams 2	DI Direct/Indirect Suspended	48 48" Length 96 96" Length 144 Length 144" Length Custom or Row Length, 24" and above in 1" increments. Ex. in inches 82, 384, etc.	400 500 HTA 625 825 960  Custom Lumen Packages with ASO diffuser. Contact Factory.	950 1200 Custom Lumen Packages. Lumen Packages with	30K 35K 40K 80 CRI 50K Upon Request TW 27K-57K 927K 90 CRI 930K 930K 940K	HTA High Transmission Acrylic ASO Flat A05 1/2" Drop A10 1" Drop A15 1-1/2" Drop	BW Batwing Indirect A05 1/2" Pop-Up A10 1" Pop-Up A15 1-1/2" Pop-Up	40VDC	Single Channel 180996-XXXX-250-300mA 180996-XXXX-300-350mA 180996-XXXX-300-350mA 180996-XXXX-510-700mA 180996-XXXX-710-880mA 180996-XXXX-90-1050mA Dual Channel 180996-XXXX-300-350mA 180996-XXXX-300-00mA 180996-XXXX-300-00mA 180996-XXXX-300-00mA 180996-XXXX-710-880mA 180996-XXXXX-90-1050mA	1C Single Circuit 2C Dual Circuit Direct/ Indirect	Single Channel CORESM-00350 CORESM-00500 CORESM-00700 CORESM-01050 CORESM-00880 Dual Channel COREDM-00350 COREDM-00500 COREDM-00700 COREDM-01050 COREDM-01050 COREDM-01050 COREDM-01050	As Specified

#### Housings

Extruded aluminum profile in a 0.080-inch wall thickness. Maximum length of each linear component is 12-ft. .060 aluminum ends are provided where needed at row termini.

A one-piece 14GA galvanized steel joiner/aligner bracket is provided for each joint between housings.

Internal cold-rolled steel components.

Inconspicuous cable hanging brackets at the end. A custom formulated non-glare matte-white polyester powder coating provides an extremely durable and long lasting finish.

Custom color finishes on request.

#### **Diffusers**

Seamless fit diffusers. Flawless and consistent end-to-end fit.

Standard direct diffuser: extruded from custom formulated high transmission white acrylic material. Allows maximum light transmission while eliminating pixilation and hot spots.

Optional direct diffuser: extruded from custom formulated smooth opal acrylic material. Offers a more esthetically white appearance. Note: reduces performance by up to 25%.

Smooth finish on both diffusers compliments the architectural elements.

Standard indirect diffuser: custom extruded batwing-type that spreads the light in a very consistent and wide beam illumination.

Additional options: 1/2", 3/4", and 1-1/2" drop style diffusers may be added to the direct position. May also be added to the indirect position as a pop-up diffuser.

## **LED Modules**

High performance linear configured LED module boards. Each board consists of multiple mid-power, high efficacy LEDs in a precise layout eliminating the need for supplemental heat sinking.

The boards produce an even and diffuse light which maximizes optical efficiency.

Color temperatures available 80 CRI: 3000K, 3500K and 4000K. Upon request: 5000K.

Color temperatures available 90 CRI: 2700K, 3000K, 3500K and 4000K.



### **Tunable White Option**

Field tunable range 2700K through 5700K. 80CRI.

#### **PoE Drivers**

UL 2108 Listed.

Plenum Rated.

LED output voltage range 12-42VDC.

Class 2 rated electrical device.

Available in both single channel and dual channel. Efficiency: 92% (typical) at 52VDC input, full load.

Constant Current accuracy +/- 3%.

Ambient temperature: 0 to 40  $^{\circ}$ C (32 to 104  $^{\circ}$ F). Storage temperature: -40 to 85  $^{\circ}$ C (-40 to 185  $^{\circ}$ F).

Max case temperature: 75°C (167°F). Environmental rating: Indoor.

#### **Dimming Performance- PoE Driver**

Dimming: PWM
Dimming type: Linear
Dimming frequency: 500Hz
Dimming range: 1-100%

#### **Molex-PoE Driver**

The Molex CoreSync Programmable Smart LED Driver is a compact low voltage, DC/DC LED driver that can be programmed to specific power outputs, for driving Constant Current LED engines in a wide variety of light fixtures.

Controlled, powered and integrated with a Molex CoreSync PoE Gateway.

This DC system provides 71.3 usable watts at the powered device, it operates at 52 VDC and has an amperage allowance 1.73 amps.

Using this product gives the end user the option of making their building a smart building combining IT and OT to one platform, while being able to control but not limited to camaras, shades, occupancy, traffic patterns and DLH.

## **CoreSync Emergency Lighting Bypass**

UL 924 Compliant, Indoor Rated. Ambient operating temperature 0-40C (32-104F).

#### **Electrical- ELB**

EM input: 110-277 VAC. Output: 12-42 VDC up to 1050MA. Standby Power: 1W.

#### Operation-ELB

In the event of a power failure, PoE power source failure or disconnection of cabling, the module will bypass normal PoE control and activate the emergency power source. The fixture will power to full brightness and return to normal operation once the emergency has been cleared.

#### **Integral Lighting Controls**

Various lighting controls and sensors are optional. Consult factory.

#### Corners

Standard 90-degree corners. Custom angled corners.

#### Installations

Designed to be suspended on cables.

Easy-connect cable hangers make installations easy. Lengths of 12-ft. and less to use one housing with two ends pre-installed.

Lengths over 12-ft. will be engineered to job requirements using multiple housings with one end preinstalled at each row end

Lengths over 12-ft. will include appropriate job required quick-connect plug-thru wire harnesses and housing joiners.

All individual modules or multiple module runs to include job required feed wire as specified.

## Certificate of Safety Compliance and Listings

Luminaire: UL and CUL listed 1598 and bears their label. Suitable for damp locations.

#### Warranty

5-year limited warranty is standard. Special 10-year warranty available on a job-to-job basis. Complete LED warranty terms available at www.mercltg.com.

Actual performance may differ as a result of end-user environment and application.

Most LED luminaires are suitable to operate in ambient temperatures from -20C (-4F) to 25C (77F).

The following exclusions apply: Luminaires with standby lighting option, integral lighting control options, or wireless control options. Consult factory.

LM-79 testing was measured under a controlled 25C (77F) ambient operating temperature.

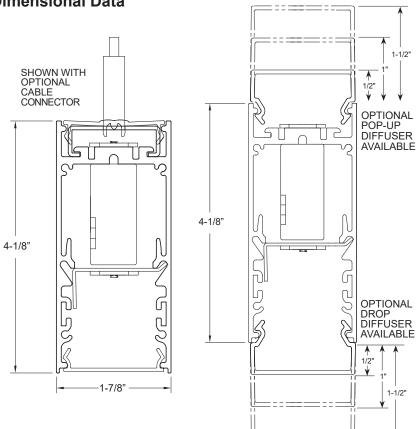


# MLS2-DI PoE Series | LIGHTSTREAMS 2

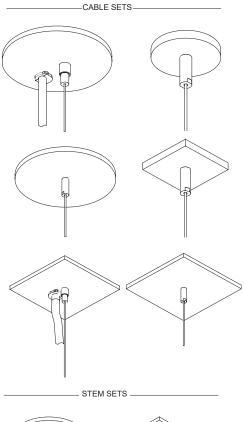
Architectural Linear LED Illuminating System | Suspended Direct/Indirect

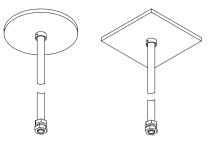


## **Dimensional Data**



# **Hanging Accessories**

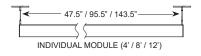


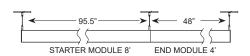


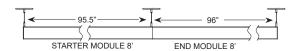
Part #	Description
R5PF-100	Round 5" power feed canopy, Hanging hardware, 100" long 1/16" cable.
R5-100	Round 5" canopy, Hanging hardware, 100" long 1/16" cable.
R2-100	Round 2" canopy, Hanging hardware, 100" long 1/16" cable.
S5PF-100	Square 5" power feed canopy, Hanging hardware, 100" long 1/16" cable.
S5-100	Square 5" canopy, Hanging hardware, 100" long 1/16" cable.
S2-100	Square 2" canopy, Hanging hardware, 100" long 1/16" cable.
RP5-24	Round 5" canopy, Hanging hardware, 24" long 1/2" dia. stem.
SP5-24	Square 5" canopy, Hanging hardware, 24" long 1/2" dia. stem.

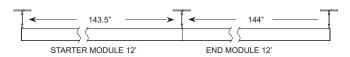
Other cable and stem lengths available. Consult factory.

# **Mounting Information**









Consult factory for additional row length information

